Instruments for preparing independent kungfu environment

1. 本文档中我全部使用 su – 转换成 root 来执行，你可以使用 sudo 来执行

2. yum install rpm-build

3. yum install numactl

4. guide of install cmake-[3.8.*]:

   wget https://cmake.org/files/v3.11/cmake-3.11.3.tar.gz

   tar zxvf cmake-3.11.3.tar.gz

   cd cmake-3.11.3/

   ./bootstrap

   [返回显示.....CMake has bootstrapped. Now run gmake.]

   gmake

   gmake install

   /usr/local/bin/cmake --version

   [返回显示...cmake version 3.11.3]

   cmake -version

   [返回显示...cmake version 3.11.3]

5. commands of install log4cplus [https://github.com/log4cplus/log4cplus]:

git clone https://github.com/log4cplus/log4cplus.git

cd log4cplus/

git submodule update --init --recursive

mkdir build

cd build

cmake ..

make

make install

[返回显示...../usr/local/lib64/liblog4cplus.so]

[返回显示....Installing: /usr/local/bin/loggingserver.....]

[注意发现功夫的 docker 这些文件都在另一个目录，所以需要建立 4 个链接文件]

###ln [参数][源文件或目录][目标文件或目录]

ln -s /usr/local/bin/loggingserver /usr/bin/loggingserver

ln -s /usr/local/lib64/liblog4cplus.so.2.0.0 /usr/lib64/liblog4cplus.so.2.0.0

ln -s /usr/local/lib64/liblog4cplus.so.0 /usr/lib64/liblog4cplus.so.0

ln -s /usr/local/lib64/liblog4cplus.so /usr/lib64/liblog4cplus.so

add LD_LIBRARY_PATH for all users

The cleanest way to add a library to the search path is by adding a file to /etc/ld.so.conf.d/

suppose log4cplus is installed in /usr/local/lib, run :

#echo "/usr/local/lib" >> /etc/ld.so.conf.d/log4cplus-2.0.so.conf

my log4cplus is installed in /usr/local/lib64, run :

echo "/usr/local/lib64" >> /etc/ld.so.conf.d/log4cplus-2.0.so.conf

load the new configuration, run the following command as root:

ldconfig –v

ldconfig

6. guide of install pid-2.1.1:

yum install python-nose

curl "https://bootstrap.pypa.io/get-pip.py" -o "get-pip.py"

python get-pip.py

pip -V

pip install pid

7. install supervisor

install dependency meld3 (yum install python-meld3)

yum install python-meld3

I meet no package python-meld3 available error, and run 'yum update',

#you may not need it

pip install meld3

pip install supervisor

8. guide of install boost-1.62:

#there is no python in it, you need reference :

#https://blog.csdn.net/majianfei1023/article/details/46781581

sudo yum install python-devel

wget

https://sourceforge.net/projects/boost/files/boost/1.62.0/boost_1_62_0.tar.gz

tar zxvf boost_1_62_0.tar.gz

cd boost_1_62_0

mkdir /opt/kungfu/

mkdir /opt/kungfu/toolchain

mkdir /opt/kungfu/toolchain/boost-1.62.0

#安装 boost 基础库

./bootstrap.sh --prefix=/opt/kungfu/toolchain/boost-1.62.0

./b2 install --prefix=/opt/kungfu/toolchain/boost-1.62.0

#执行第二遍，专门安装 boost.python

./b2 --with-python --prefix=/opt/kungfu/toolchain/boost-1.62.0 install

#there is /usr/lib64/libpython2.7.so, but we need libpython.so, run this command to make a soft link:

ln -s /usr/lib64/libpython2.7.so.1.0 /usr/lib64/libpython.so

#maybe need a reload:

ldconfig

#ldconfig -v

9. guide of install rfoo [https://github.com/aaiyer/rfoo]:

   #looks rfoo requires python, so I run it after boost.python installed.

git clone https://github.com/aaiyer/rfoo.git

cd rfoo/

#install dependency Cython first

pip install Cython

#[遇到错误信息]

#ipaclient 4.5.4 requires jinja2, which is not installed.

#rtslib-fb 2.1.63 has requirement pyudev>=0.16.1, but you'll have pyudev 0.15

#which is incompatible.

#ipapython 4.5.4 has requirement dnspython>=1.15, but you'll have

#dnspython 1.12.0 which is incompatible.

#解决：

#安装 jiaja2

yum -y install python-jinja2

#更新 pyudev

git clone https://github.com/lunaryorn/pyudev.git

cd pyudev

sudo python setup.py install

#更新 dnspython

wget http://www.dnspython.org/kits/1.15.0/dnspython-1.15.0.tar.gz

tar -zxvf dnspython-1.15.0.tar.gz

cd dnspython-1.15.0

sudo python setup.py install

#再运行一遍 pip install Cython 不再显示错误

#继续执行 rfoo 的安装

sudo python setup.py install

10. compiling kungfu and install kungfu

    git clone https://github.com/taurusai/kungfu.git

    cd kungfu

    mkdir build

    cd build

    cmake..

    make

    make package

    yum install kungfu-0.0.5-Linux.rpm

现在安装会报错：

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: rfoo >= 1.3.1

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: log4cplus2 = 2.0.0_RC1

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: pid >= 2.1.1

Error: Package: kungfu-0.0.5-20180615193550.x86_64 (/kungfu-0.0.5-Linux)

Requires: supervisor >= 3.1.0

经过修改 kungfu/CMakeLists.txt

#92 行

OPTION(SKIP_DEPENDENCY_CHECKING

"SKIP_CHECK_KUNGFU_DEPENDENCY, default OFF." ON)

从 OFF 改为 ON，再删除 build 下重新 cmake .. 就好了，不觉明历

11. 当需要一些加密库的时候，使用下述命令安装

    yum install openssl-devel

    yum install libssh.x86_64

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